



*Montgomery*

Alabama Seminar  
2013

# O&M MANUAL HIGHLIGHTS



# GENERAL PROVISIONS

Each pipeline **must** be  
operated according to this  
**SUBPART**

**§192.603(a)**

Subpart L—Operations  
§ 192.601 Scope.  
This subpart prescribes minimum re-  
quirements for the operation of pipe-  
line facilities.



# §192.603(b)

# the procedures of



# RECORDS

- Life of Facility
  - Include construction, materials, repairs, MAOP information, and most corrosion records
  - Retained for active life of facility



# RECORDS

- Other Records
  - Include tests, inspections, patrols, surveys and procedure reviews which prove compliance with 49 CFR 192
  - Retain for 5 years (consider IM requirements)

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 25, 2011

Tater Pipeline Company  
Anywhere, USA

CPF 2011-XXXX

Dear Sirs :

One day, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected Tater Pipeline Company procedures for Operations and Maintenance in Anywhere, USA.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within plans or procedures, as described below:

1. [cite the regulation and title]

[quote the regulation]

[describe the procedures in a manner that makes clear what is inadequate]

2. [cite the regulation and title]

[quote the regulation]

[describe the procedures in a manner that makes clear what is inadequate]

# NOTICE OF AMENDMENT

The **ADMINISTRATOR** of PHMSA or a **STATE AGENCY** with a 60105 Certification may require modifications to an **INADEQUATE PLAN**

**§192.603(c)**



**§192.605**

**PROCEDURE MANUAL FOR  
OPERATIONS, MAINTENANCE AND  
EMERGENCIES**



# GENERAL REQUIREMENTS

- Each operator shall prepare and follow for each pipeline

**A manual of written procedures for O&M activities and Emergency Response**



**§192.605(a)**





# GENERAL REQUIREMENTS

- **Transmission lines must include procedures for abnormal operations**

**§192.605(a)**





## GENERAL REQUIREMENTS

- The manual must be reviewed and updated at intervals not to exceed 15 months, but at least once each calendar year
- Manual prepared before operations start

**§192.605(a)**



# GENERAL REQUIREMENTS

- Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted



**§192.605(a)**



# MANUAL CONSIDERATIONS

- Is it in writing?
- ▮ Is it adequate?
- ▮ Is it being followed?
- ▮ Does it apply to each pipeline system?
- ▮ Did it exist before startup?
- ▮ Is it reviewed as required?



# MANUAL CONSIDERATIONS

- ▮ How are changes communicated?
- ▮ How is it kept?
- ▮ All copies same version?
- ▮ Employees trained on it?
- ▮ How do employees access it?



## **PROCEDURES REQUIRED**

### **Maintenance and normal operations**

- **If applicable, the manual must include procedures for the following to provide safety during maintenance and operations:**

**§192.605(b)**



# OPERATING, MAINTAINING AND REPAIRING

(1) Operating, maintaining and repairing the pipeline in accordance with each of the requirements of this subpart and subpart M of this part

**§192.605(b)**





# OPERATIONS, MAINTENANCE AND REPAIRS

- Training and OQ
- Maps & Records
- MAOPs
- Communications
- Line Markers
- ROW Inspections
- Valve Maintenance
- Corrosion Control Records
- Pipeline Repairs
- CRM
- Overpressure Safety Devices
- Compressors
- Regulators
- Signage
- Security of Facilities
- Smoking or Open Flames
- Accidental Ignition
- Public Education
- Damage Prevention
- Continuing Surveillance
- Odorization





# CORROSION

**(2) Controlling corrosion in accordance with the operations and maintenance requirements of SUBPART I of this part**

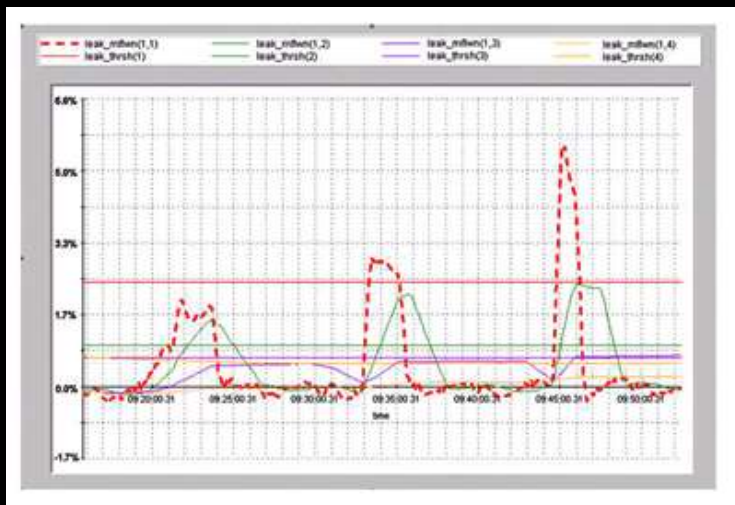
**§192.605(b)**



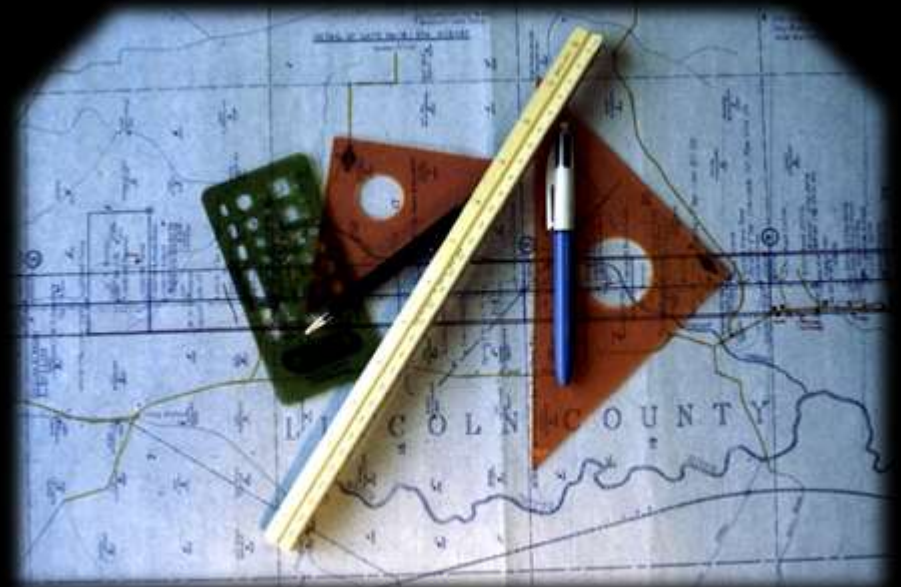


## RECORDS AND HISTORY

(3) Making construction records, maps and operating history available to appropriate operating personnel



§192.605(b)





## DATA FOR INCIDENTS

**(4) Gathering of data needed for reporting incidents under Part 191 of this chapter in a timely and effective manner**



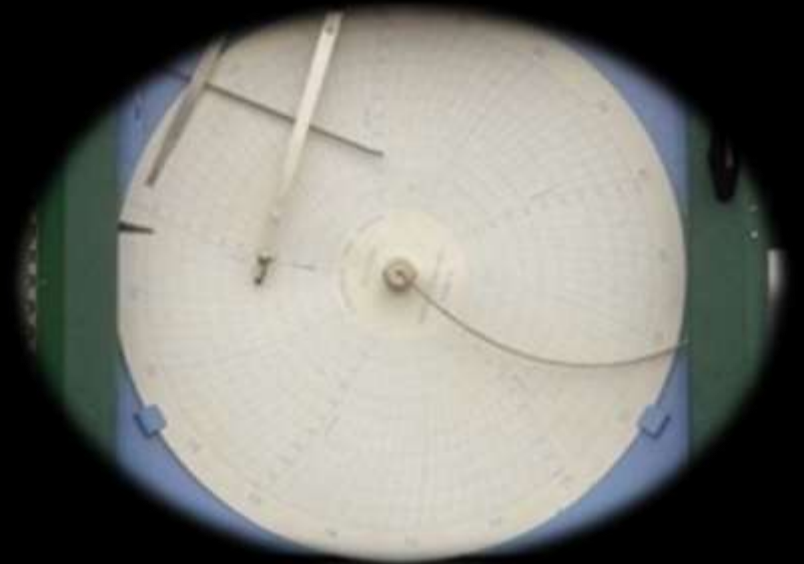
**§192.605(b)**



# STARTING AND SHUTTING DOWN A PIPELINE

(5) Starting up and shutting down any part of the pipeline in a manner designed to assure operation within the MAOP limits prescribed by this part, plus the build-up allowed

**§192.605(b)**





# COMPRESSOR STATIONS - MAINTENANCE

**(6) Maintaining compressor stations, including provisions for isolating units or sections of pipe and for purging before returning to service**



**§192.605(b)**





# COMPRESSOR STATIONS - OPERATIONS

## (7) Starting, operating & shutting down gas compressor units



### START PROCEDURE FOR 305 FROM UNIT HMI

1. TURN ON FUEL GAS VALVE IN FUEL SKID
2. CLOSE SEAL OIL DRAIN VALVE (located west side of skid above compressor)
3. TURN SWITCH ON PANEL TO LOCAL MANUAL
4. PUSH START BUTTON ON PANEL

### STOP PROCEDURE FOR 305 FROM UNIT HMI

1. TURN SWITCH ON PANEL TO LOCAL MANUAL
2. PUSH STOP BUTTON ON PANEL
3. CLOSE FUEL GAS VALVE IN FUEL SKID AFTER UNIT STOPS
4. OPEN SEAL OIL DRAIN VALVE AFTER UNIT BLOWS DOWN (located west side of skid above compressor)

§192.605(b)



## PROCEDURE REVIEW

- (8) Periodically reviewing the work done by operator personnel and modifying the procedures when deficiencies are found

**§192.605(b)**





# UNSAFE VAPORS

- (9) Procedures about precautions to follow regarding unsafe accumulations of vapors or gas in excavated trenches
- If needed, provide breathing apparatus, rescue harness and line



**§192.605(b)**





# HOLDERS

(10) Develop plan to test and inspect pipe - type or bottle - type holders



**§192.605(b)**



## GAS REPORTS

**(11) Respond promptly to a report of gas odor in or near a building, unless covered by emergency plan**



**§192.605(b)**



# CONTROL ROOM MANAGEMENT

**(12) Implement applicable control room management procedures required by §192.631**

**§192.605(b)**





# ABNORMAL OPERATIONS



- For **transmission lines**, the manual must include procedures for the following to provide safety when operating design limits have been exceeded:

**§192.605(c)**





# ABNORMAL OPERATIONS

- (1) Responding to, investigating and correcting the cause of:**
  - (i) Unintended closure of valves or shutdowns;**

**§192.605(c)**





# ABNORMAL OPERATIONS



(ii) Increase or decrease in pressure or flow rate outside normal operating limits;

§192.605(c)



# ABNORMAL OPERATIONS

(iii) Loss of communications;

§192.605(c)

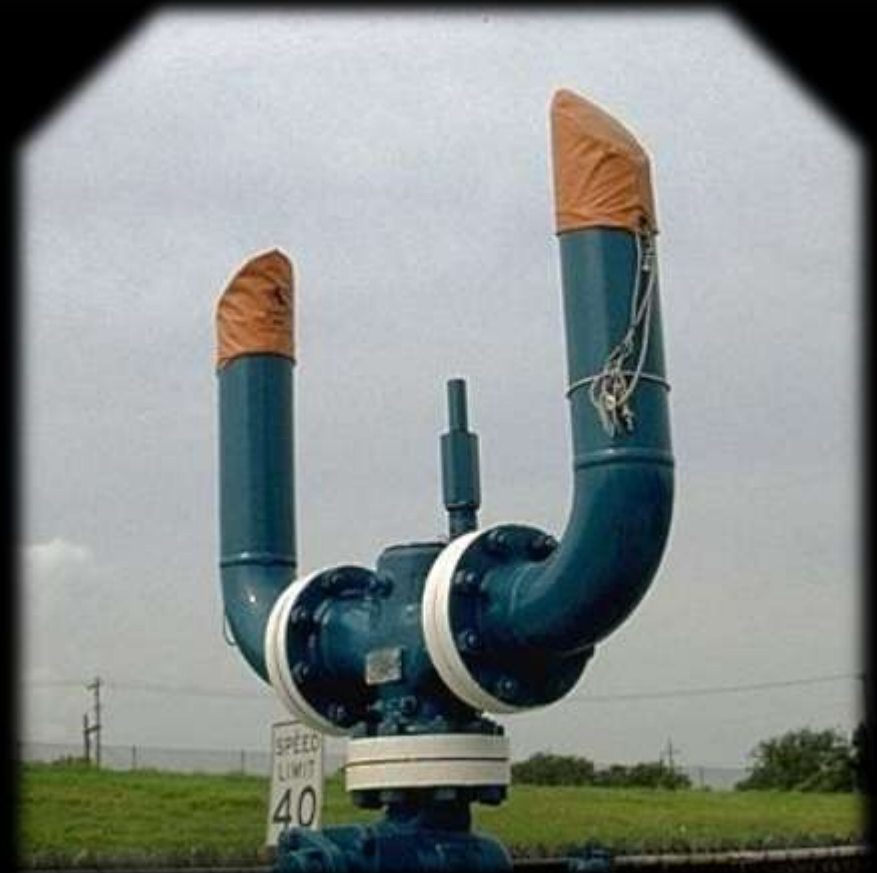




# ABNORMAL OPERATIONS

(iv) Operation of any  
safety device;  
and

**§192.605(c)**







## ABNORMAL OPERATIONS

(v) **Foreseeable** component malfunction, deviation from normal operation or personnel error resulting in a hazard to persons or property

**§192.605(c)**





## SYSTEM INTEGRITY

(2) Checking at sufficient critical locations in the system to determine continued integrity and safe operation

**§192.605(c)**





# NOTIFICATION

**(3) Notifying responsible operator personnel  
when notice of an abnormal operation is  
received**

**§192.605(c)**





## **ABNORMAL PROCEDURES REVIEW**

- (4) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation; and**
  - Taking corrective action where deficiencies are found**

**§192.605(c)**



## EXCEPTIONS

**(5) Exempted from write-up of abnormal operation procedures;**

- **Distribution operators with transmission lines operated in conjunction with the distribution system**

**§192.605(c)**



## SAFETY - RELATED CONDITION REPORTS

Instructions for personnel to identify and report conditions that potentially may be safety - related conditions subject to reporting requirements of §191.23



**§192.605(d)**





## ADDITIONAL PROCEDURES

The procedures required by

- §192.613(a), Surveillance
- §192.615, Emergency Response
- §192.617, Failure Investigation must be included in the manual

**§192.605(e)**





# EVIDENCE

- Copies of procedures
  - Inadequate
  - Not following
- Records of procedure reviews
- Records of inspection, tests or surveys





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